

CLAIMS

1. Light influencing element (6) for directing the
light issued from a light source (4) into a
5 predetermined angular range,
wherein the light influencing element (6) has a
plurality of rib-like raster elements (7, 12), which
have reflecting side walls and are arranged in a
regular structure,
10 characterized in that,
the raster elements (7, 12) have a height (H) of a
maximum of 5mm.
2. Light influencing element according to claim 1,
15 characterized in that,
the raster elements (7, 12) are held together via a
side frame (11).
3. Light influencing element according to claim 1 or 2,
20 characterized in that,
this is of a transparent base plate (9) on the one
broad surface of which the raster elements (7, 12)
are arranged.
- 25 4. Light influencing element (6) for directing the
light issued from a light source (4) into a
predetermined angular range,
wherein the light influencing element (6) has a
plurality of rib-like raster elements (7, 12), which
30 have reflecting side walls and are arranged in a
regular structure,
characterized in that,
this is of a transparent base plate (9) on the one
broad side of which the raster elements (7, 12) are
35 arranged.

5. Light influencing element according to claim 4,
characterized in that,
the raster elements (7, 12) have a height (H) of a
maximum of 5 mm.
- 5 6. Light influencing element according to any of claims
3 to 5,
characterized in that,
the base plate (9) and the raster elements (7, 12)
10 are formed in one piece.
7. Light influencing element according to any of claims
3 to 5,
characterized in that,
15 the base plate (9) is glued with the raster elements
(7, 12).
8. Light influencing element according to any of claims
3 to 7,
20 characterized in that,
on the side of the raster elements (7, 12) opposite
to the base plate (9) there is arranged a further
transparent plate (10).
- 25 9. Light influencing element according to any preceding
claim,
characterized in that,
the raster elements (7, 12) are of a transparent
material, wherein at least the side walls and the
30 end surfaces away from the light source (4) of the
raster elements (7, 12) are provided with a
reflecting layer (8).
10. Light influencing element according to any preceding
35 claim,
characterized in that,

this is formed by means of an injection moulded part.

- 5 11. Light influencing element according to any preceding claim,
characterized in that,
the raster elements (7, 12) and, if applicable, the transparent plates (9, 10), are of PMMA.
- 10 12. Light influencing element according to any preceding claim,
characterized in that,
the spacing (D) between two raster elements (7, 12) corresponds to about double the height (H) of the
15 raster elements (7, 12).
13. Light influencing element according to any preceding claim,
characterized in that,
20 the raster elements (7, 12) have a height (H) of about 1mm and the spacing (D) is about 2mm.
14. Light influencing element according to any preceding claim,
25 characterized in that,
the raster elements (7) are linearly formed and arranged parallel neighbouring one another.
15. Light influencing element according to any of claims
30 1 to 13,
characterized in that,
the raster elements (7) are linearly formed and arranged in a crossing structure.
- 35 16. Light influencing element according to any of claims 1 to 13,

characterized in that,
the raster elements (12) are formed ring-shaped.

- 5 17. Light influencing element according to claim 16,
characterized in that,
the ring-shaped raster elements (12) are arranged in
a honeycomb pattern.
- 10 18. Light influencing element according to claim 17,
characterized in that,
a ring has a diameter of about 2mm.
- 15 19. Light influencing element according to claim 17,
characterized in that,
the ring-shaped raster elements (12) are
concentrically arranged.
- 20 20. Light influencing element according to any preceding
claim,
characterized in that,
the raster elements (7) are, seen in cross-section,
formed V-shaped.
- 25 21. Light influencing element according to any of claims
1 to 19,
characterized in that,
the raster elements (7), seen in cross-section, have
a parabolic form V-structure.
- 30 22. Light influencing element according to any of claims
1 to 19,
characterized in that,
the raster elements (7), seen in cross-section, in
each case have a rib structure.
- 35 23. Light influencing element according to claim 22,

characterized in that,
the rib structure is formed by means of prismatic or
wedge shaped stepped sections (7) arranged over one
another.

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24. Luminaire (1) having a light source (4) or
connecting means (3) for such, and a light
influencing element (6), arranged before the light
source (4), in accordance with any preceding claim.

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25. Luminaire according to claim 24,
characterized in that,
the light source is two dimensional.

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26. Luminaire according to claim 24,
characterized in that,
this has as illumination means a base plate (13) on
the side surface of which towards the raster
elements (7) there are arranged individual light
sources (14).

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27. Luminaire according to claim 26,
characterized in that,
the individual light sources (14) are so arranged,
with regard to the light influencing element (6),
that they emit their light in substance into the
free spaces between the raster elements (7).

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